# CHAPTER 11 CLARK COUNTY AND THE CITY OF DUBOIS, CITY OF SPENCER FLOODPLAIN ORDINANCE (REVISIONS HIGHLIGHTED)

#### 1.0 Introduction:

# A. Statutory Authority

The Legislature of the State of Idaho in I.C. 46-1020 through I.C. 46-1024, authorized local government units to adopt a floodplain map and floodplain management ordinance that identifies floodplains and that sets forth minimum development requirements in floodplains that are designed to promote the public health, safety, and general welfare of its citizenry.

# B. Findings of Fact

The flood hazard areas of Clark County and the City of Dubois are subject to periodic inundation that results in loss of life and property, health and safety hazards, disruption of commerce and governmental services, extraordinary public expenditures for flood relief and protection, and impairment of the tax base, all of which adversely affect the public health, safety and general welfare.

- 1. These flood losses are caused by structures in flood hazard areas, which are inadequately elevated, flood-proofed, or otherwise unprotected from flood damages, and by the cumulative effect of obstructions in floodplains causing increases in flood heights and velocities.
- 2. Local government units have the primary responsibility for planning, adoption and enforcement of land use regulations to accomplish proper floodplain management.

# C. Statement of Purpose

It is the purpose of this ordinance to promote the public health, safety and general welfare and to minimize public and private losses due to flood conditions in specific areas by provisions designed to:

- 1. Require that development that is vulnerable to floods, including residential, commercial, and industrial structures and facilities necessary for the general health, safety and welfare of citizens, be protected against flood damage at the time of initial construction;
- 2. Restrict or prohibit uses which are dangerous to health, safety and property due to water or erosion hazards, or which increase flood heights, velocities, or erosion;
- 3. Control non-agricultural filling, grading, dredging and other development which may increase flood damage or erosion;
- 4. Prevent or regulate the construction of flood barriers in mapped floodplains that will unnaturally divert flood waters or that may increase flood hazards to other lands;
- 5. Preserve and restore natural floodplains, stream channels, and natural protective barriers which carry and store flood waters.

#### D. Objectives

The objectives of this ordinance are to:

- 1. Protect human life, health and property;
- 2. Minimize damage to public facilities and utilities such as water storage and sewage treatment plants, water and gas mains, electric, telephone and sewer lines, streets and bridges located in floodplains;
- 3. Help maintain a stable tax base by providing for the sound use and development of flood prone areas;
- 4. Minimize expenditure of public money for costly flood control projects;
- 5. Minimize the need for rescue and emergency services associated with flooding and generally undertaken at the expense of the general public;
- 6. Minimize prolonged business interruptions.

# A. Applicability

The floodplain ordinance is applicable to all newly constructed residential, commercial, industrial, or substantially improved structures located in the mapped floodplain in Clark County, Dubois, or Spencer, Idaho. The following are exempted from this ordinance

- 1. **Minor projects:** Projects too small to warrant an engineering study and the certification. Many of these can be determined with logic: a sign post or telephone pole will not block flood flows. A driveway, road or parking lot at grade (without any filling) won't cause a problem, either. Building additions, accessory buildings, and similar small projects can be located in the conveyance shadow. This is the area upstream and downstream of an existing building or other obstruction to flood flows. Flood water is already flowing around the larger obstruction, so the addition of a new structure will not change existing flood flow.
- 2. **Insignificant activities** such as planting a garden, farming, putting up a mailbox or erecting a flagpole. Routine maintenance of structures, such as painting or reroofing.
- 3. **Administration:** To ensure the application of the definition of minor projects either the Clark County Planning and Zoning Administrator or the Clark Floodplain Administrator will determine if a project is minor according to the principles stated above.

#### 2.0 General Provisions:

# A. Lands to Which This Ordinance Applies

This ordinance shall apply to all Special Flood Hazard Areas within the jurisdiction of Clark County and the City of Dubois. Nothing in this Ordinance is intended to allow uses or structures that are otherwise prohibited by the zoning ordinance.

#### B. Basis for Area of Special Flood Hazard

The Special Flood Hazard Areas identified by the Federal Emergency Management Agency Flood Insurance Rate Maps (FIRM) dated September 24, 1984, and other supporting data, are adopted by reference and declared a part of this ordinance. The FIRM is on file at the offices of the City of Dubois and Clark County Clerk respectively.

# C. Establishment of Floodplain Development Permit

A Floodplain Development Permit shall be required prior to development activities in Special Flood Hazard Areas established in 3.0 (B).

# D. Interpretation

In the interpretation and application of this ordinance all provisions shall be:

- 1. Considered as minimum requirements;
- 2. Liberally construed in favor of the governing body, and;
- 3. Deemed neither to limit nor repeal any other powers granted under state statutes.

# E. Warning and Disclaimer of Liability

The degree of flood protection required by this ordinance is considered reasonable for regulatory purposes and is based on scientific and engineering considerations. Larger floods can and will occur. Flood heights may be increased by man-made or natural causes. This ordinance does not imply that land outside the Special Flood Hazard Areas or uses permitted within such areas will be free from flooding or flood damages. This ordinance shall not create liability on the part of Clark County, the City of Dubois, the City of Spencer or by any officer or thereof for flood damages that result from reliance on this ordinance or an administrative decision lawfully made hereunder.

#### 3.0 Administration:

# A. Designation of Floodplain Ordinance Administrator

The Clark County Disaster Services Coordinator is hereby appointed as the Floodplain Administrator who is responsible for administering and implementing the provisions of this ordinance.

#### B. Permit Procedures

Application for a Floodplain Development Permit shall be made to the Planning and Zoning Administrator on forms furnished by the administrator or the administrator's designee prior to starting development activities. Specifically, the following information is required:

# 1. Application Stage

- a. Plans in duplicate **drawn to scale** with elevations of the project area and the nature, location, dimensions of existing and proposed structures, earthen fill placement, storage of materials or equipment and drainage facilities.
- b. Elevation in relation to the Flood Protection Elevation, or highest adjacent grade, of the lowest floor level, including crawlspaces or basement, of all proposed structures;

i. Elevation to which any non-residential structure will be flood-proofed;

ii. Design certification from a registered professional engineer or architect that any proposed non-residential flood-proofed structure will meet the flood-proofing criteria in 4.0 (F) (2);

iii. Description of the extent to which any watercourse will be altered or relocated as a result of a proposed development, and;

## 2. Construction Stage

- a. For all new residential, commercial, or industrial structure construction and substantial improvements, the permit holder shall provide to the Floodplain Administrator an as-built certification of the floor elevation or flood-proofing level, using appropriate FEMA elevation or flood-proofing certificate, immediately after the lowest floor or flood-proofing is completed. When flood-proofing is utilized for non-residential structures, the certification shall be prepared by or under the direct supervision of a professional engineer or architect and certified by same.
- b. Certificate deficiencies identified by the Floodplain Administrator shall be corrected by the permit holder immediately and prior to work proceeding. Failure to submit certification or failure to make the corrections shall be cause for the Floodplain Administrator to issue a stop-work order for the project.

#### 3. Technical Review

a. If the community does not have the expertise to evaluate the technical data that is part of the application, the community may contract for an independent engineering review or require a review by FEMA through the Letter of Map Revision process. The applicant will pay the costs of an independent technical review.

# 4. Expiration of Floodplain Development Permit

a. All floodplain development permits shall be conditional upon the commencement of work within 180 days. A floodplain development permit shall expire 180 days after issuance unless the permitted activity has been substantially begun and thereafter is pursued to completion.

#### C. Duties and Responsibilities of the Administrator

Duties of the Floodplain Administrator shall include, but shall not be limited to:

- 1. Review all floodplain development permit applications to assure that the permit requirements of this ordinance have been satisfied.
- 2. Review proposed development to assure that necessary permits have been received from governmental agencies from which approval is required by federal or state law. Permits may include section 404 of the Federal Water Pollution Control Act Amendments of 1972, 33 U.S.C. 1334; the Endangered Species Act of 1973, 16 U.S.C. 1531-1544; and State of Idaho Stream Channel Alteration permits, I.C. 42 Chapter 38 require that copies of such permits be provided and maintained on file.
- 3. When Base Flood Elevation data or floodway data are not available, then the Floodplain Administrator shall obtain, review and reasonably utilize any base flood elevation and floodway data available from a federal, state or other source in order to administer the provisions of this ordinance.

- 4. When Base Flood Elevations or other current engineering data are not available, the Floodplain Administrator shall take into account the flood hazards, to the extent they are known, to determine whether a proposed building site will be reasonably safe from flooding.
- 5. Obtain, and record the actual elevation in relation to the vertical datum on the effective FIRM, or highest adjacent grade, of the lowest floor level, including basement, of all new construction or substantially improved structures.
- 6. Obtain, and record the actual elevation, in relation to the vertical datum on the effective FIRM to which any new or substantially improved structures have been flood-proofed.
- 7. When flood-proofing is utilized for a structure, the Floodplain Administrator shall obtain certification of design criteria from a registered professional engineer or architect.
- 8. Where interpretation is needed of the exact location of boundaries of the Areas of Special Flood Hazard including regulatory floodway (for example, where there appears to be a conflict between a mapped boundary and actual field conditions) the Floodplain Administrator shall make the interpretation. Any person contesting the location of the boundary shall be given a reasonable opportunity to appeal the interpretation as provided in this Ordinance.
- 9. All records pertaining to the provisions of this ordinance shall be maintained in the respective office of the city/county clerk or his/her designee and shall be open for public inspection.

# 1.0 Provisions for Flood Protection:

## A. Subdivision Standards

- 1. All subdivision proposals shall be consistent with the need to minimize flood damage.
- 2. All subdivision preliminary plats/development plans shall include the mapped flood hazard zones from the effective FIRM.
- 3. Base flood elevation data shall be generated and/or provided for subdivision proposals and all other proposed development, including manufactured home parks and subdivisions, greater than fifty lots or five acres, whichever is less.
- 4. All subdivisions shall have public utilities and facilities such as sewer, gas, electric and water systems located and constructed to minimize flood damage.
- 5. All subdivisions shall have adequate drainage provided to reduce exposure to flood hazards.

# A. Construction Standards

44 CFR 59.1. Definitions: "Substantial improvement" means any reconstruction, rehabilitation, addition or other improvement to a structure, the total cost of which equals or exceeds 50 percent of the market value of the structure before the start of construction of the improvement.

44 CFR 59.1. Definitions: "Substantial damage" means damage of any origin sustained by a structure whereby the cost of restoring the structure to its before damaged condition would equal or exceed 50 percent of the market value of the structure before the damage occurred.

In all Areas of Special Flood Hazard the following provisions are required.

- 1. New construction and substantial improvements of an existing residential, commercial, or industrial structure, including a structure that has been substantially damaged, shall be anchored to prevent flotation, collapse or lateral movement of the structure.
- 2. New construction and substantial improvements of an existing residential, commercial, or industrial structure, including a structure that has been substantially damaged, shall be constructed with materials and utility equipment resistant to flood damage.
- 3. New construction or substantial improvements of an existing residential, commercial, or industrial structure structure, including a structure that has been substantially damaged, shall be constructed by methods and practices that minimize flood damage.
- 4. All new construction or substantial improvements of an existing residential, commercial, or industrial structure, including a structure that has been substantially damaged, that includes a fully enclosed area located below the lowest floor formed by the foundation and other exterior walls shall be designed to be an unfinished or flood resistant enclosure. The enclosure shall be designed to equalize hydrostatic flood forces on exterior walls by allowing for the automatic entry and exit of floodwater. Designs for complying with this requirement must be certified by a licensed professional engineer or architect or meet the following minimum criteria:
  - a. Provide a minimum of two openings with a total net area of not less
    - i. than one square inch for every square foot of enclosed area subject to flooding;
    - ii. the bottom of all openings shall be no higher than one foot above the higher of the exterior or interior grade or floor immediately below the opening;
    - iii. openings may be equipped with screens, louvers, valves or other coverings or devices provided they permit the automatic flow of floodwater in both directions without manual intervention.
  - b. To comply with the "Lowest Floor" criteria of this ordinance, the unfinished or flood resistant enclosure shall only be used for parking of vehicles, limited storage of maintenance equipment used in connection with the premises, or entry to the elevated area.
  - c. The interior portion of such enclosed area shall not be partitioned or finished into separate rooms.
  - d. For crawlspace foundation types, construction must follow the guidelines in FEMA TB 11-01, Crawlspace Construction for Structures Located in Special

Flood Hazard Areas: National Flood Insurance Program Interim Guidance, specifically:

- i. Below grade crawlspaces are prohibited at sites where the velocity of floodwaters exceed 5 feet per second;
- ii. Interior grade of the crawlspace below the BFE must not be more than 2 feet below the lowest adjacent exterior grade (LAG);
- iii. Height of the below grade crawlspace, measured from the lowest interior grade of the crawlspace to the bottom of the floor joist must not exceed 4 feet at any point;
- iv. Contain an adequate drainage system that removes floodwaters from the interior area of the crawlspace.
- 5. All heating and air conditioning equipment and components, all electrical, ventilation, plumbing, and other facilities shall be designed and/or elevated to prevent water from entering or accumulating within the components during flooding.
- 6. New and replacement water supply systems shall be designed to minimize or to eliminate infiltration of flood waters into the system.
- 7. New and replacement sanitary sewage systems shall be designed to minimize or to eliminate infiltration of flood waters into the systems and discharges from the systems into flood waters.
- 8. On-site waste disposal systems shall be located and constructed to avoid functional impairment, or contamination from them, during flooding.
- 9. Any alteration, repair, reconstruction or improvement to a structure that is not compliant with the provisions of this ordinance, shall be undertaken only if the nonconformity is minimal in order to meet health and safety standards.

#### C. Manufactured Home Standards

In all Areas of Special Flood Hazard where the Flood Protection Elevation is established, these standards for manufactured homes and recreational vehicles that are an allowed use under the zoning ordinance shall apply:

- 1. Manufactured homes placed or substantially improved:
  - a. On individual lots or parcels
  - b. In new or substantially improved manufactured home parks or subdivisions
  - c. In expansions to existing manufactured home parks or sub-divisions, or on a site in an existing manufactured home park or subdivision where a manufactured home has incurred "substantial damage" as the result of a flood, must have the lowest floor, including basement, elevated to the Flood Protection Elevation.
- 2. Manufactured homes placed or substantially improved in an existing manufactured home park or subdivision may be elevated so that either:

- a. The lowest floor of the manufactured home is elevated to the Flood Protection Elevation or one foot above the level of the base flood elevation, whichever is higher.
- b. The manufactured home chassis is elevated and supported by reinforced piers (or other foundation elements of at least an equivalent strength) of no less that 36 inches above the highest adjacent grade.
- 3. Manufactured homes shall be anchored to prevent flotation, collapse, or lateral movement. Methods of anchoring may include, but are not limited to, use of overthe-top or frame ties to ground anchors. This standard shall be in addition to, and consistent with, applicable state requirements.
- 4. Manufactured homes placed on solid perimeter walls shall meet the flood vent requirements in 4.0 (B) (4).

## D. Accessory Structures

Relief from the elevation or dry flood-proofing standards may be granted for a non-agriculture accessory structure containing no more than 200 square feet smaller than the primary uses structure in size by at least 25% of the residences "footprint". Such a structure must meet the following standards:

- 1. It shall not be used for human habitation;
- 2. It shall be constructed of flood resistant materials;
- 3. It shall be constructed and placed on the lot to offer the minimum resistance to the flow of floodwaters;
- 4. It shall be firmly anchored to prevent flotation;
- 5. Services such as electrical and heating equipment shall be elevated or flood-proofed to or above the Flood Protection Elevation;
- 6. It shall meet the opening requirements of 4.0 (B) (4).

# E. Recreational Vehicle Standards

In all Areas of Special Flood Hazard, Recreational Vehicles, must either:

- 1. Be on the site for fewer than 180 consecutive days:
- 2. Be fully licensed and ready for highway use, on its wheels or jacking system, attached to the site only by quick disconnect type utilities and security devices, and have no permanently attached structures or addition, or
- The recreational vehicle must meet all the requirements for "New Construction," including the anchoring and elevation requirements.

## F. Floodway Standards

The following provisions shall apply in a floodway:

1. A project in the regulatory floodway must undergo an encroachment review to determine its effect on flood flows. An encroachment analysis must include:

- a. Determination and documentation that the filling, grading or construction of a structure will not obstruct flood flows and will not cause an increase in flood heights upstream or adjacent to the project site;
- Determination and documentation that grading, excavation, channel improvements, bridge and culvert replacements that remove an obstruction, do not cause increases in downstream flood flows;
- c. Certification and documentation by a licensed professional engineer that the project will not result in a rise in flood heights;
- d. The Administrator may make the encroachment determination for minor projects, such as projects that do not increase the natural grade (e.g., paving a driveway or parking lot at existing grade, open fences and small isolated obstructions such as a mailbox or telephone pole.
- Upon demonstrating that there are no alternatives, the applicant may propose an
  encroachment in the floodway that will cause an increase in the base flood elevation
  in excess of the allowable level provided that the applicant obtain a Conditional
  Letter of Map Revision from FEMA before the development can be approved and
  permitted.

## G. Standards for Zones with Base Flood Elevations

In Special Flood Hazard Areas designated A1-30, AE, AH, A (with estimated BFE), the following provisions are required.

- 1. New construction and substantial improvements
  - a. Where base flood elevation data are available, new construction or substantial improvement of any structure or manufactured home shall have the lowest floor, including basement, constructed at or above the community's Flood Protection Elevation. If solid foundation perimeter walls are used to elevate a structure, openings sufficient to facilitate the unimpeded movement of flood waters shall be provided in accordance with the construction standards in 4.0 (B) (4).

#### 2. Non-Residential Construction

- a. New construction or the substantial improvement of any non-residential structure located in zones A1-30, AE, or AH must be flood-proofed if the new construction or improvement is not elevated. The structure and attendant utility and sanitary facilities, must be designed to be water tight to the Flood Protection Elevation or to one (1) foot above the base flood elevation, whichever is higher, with walls substantially impermeable to the passage of water, and structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effect of buoyancy. A licensed professional engineer or architect must certify that the design and methods of construction are in accordance with accepted standards of practice for meeting these provisions, and shall provide certification to the Administrator.
- 3. Where the floodway has not been determined, no new construction, substantial improvements, or other development (including fill) shall be permitted in Zones A1-30 and AE on the effective FIRM, unless it is demonstrated that the cumulative effect

of the proposed development, when combined with all other existing and anticipated development, will not increase the water surface elevation of the base flood more than one foot at any point within the community. Applicants of proposed projects that increase the base flood elevation more than one foot are required to obtain and submit to the Floodplain Administrator, a Conditional Letter of Map Revision (CLOMR) preconstruction.

- 4. Post construction, the applicant must apply to FEMA for a Letter of Map Revision for changes to the flood hazard map proposed in the CLOMR.
- In AH Zones, drainage paths shall be provided to guide flood water around and away from proposed and existing structures.

# G. Standards for Areas of Shallow Flooding (AO Zones)

Shallow flooding areas designated AO Zones, are Areas of Special Flood Hazard that have base flood depths of one to three feet, with no clearly defined channel. The following provisions apply.

- 1. All new construction and substantial improvements of residential, commercial, or industrial and nonresidential structures shall have the lowest floor, including basement, elevated above the adjacent grade at least as high as the flood depth number specified in feet on the Flood Insurance Rate Map (FIRM). If no flood depth number is specified, the lowest floor, including basement, shall be elevated at least two feet (2) above the highest adjacent grade. Openings sufficient to facilitate the unimpeded movement of flood waters shall be provided in accordance with the construction standards in 4.0 (B) (4).
- 2. New construction or the substantial improvement of a non-residential structure, non-accessory structure, may be flood-proofed in lieu of elevation. The structure and attendant utility and sanitary facilities must be designed to be water tight to the specified base flood level or at least two (2) feet above highest adjacent grade, with walls substantially impermeable to the passage of water, and structural components having the capability of resisting hydrostatic and hydrodynamic loads and the effect of buoyancy. A registered professional engineer or architect shall certify that the design and methods of construction are in accordance with accepted standards of practice for meeting these provisions, and shall provide certification to the Floodplain Administrator.
- 3. Drainage paths shall be provided to guide floodwater around and away from all proposed and existing structures.

## I. Alteration of a Watercourse

A water course is considered altered when any change occurs within its banks.

 The bankfull flood carrying capacity of the altered or relocated portion of the water course shall not be diminished. Prior to issuance of a floodplain development permit, the applicant must submit a description of the extent to which any water course will be altered or relocated as a result of the proposed development and submit certification by a registered professional engineer that the bankfull flood carrying capacity of the water course will not be diminished.

- 2. Adjacent communities, the U.S. Army Corps of Engineers and the Idaho Department of Water Resources Stream Channel Alteration program must be notified prior to any alteration or relocation of a water source. Evidence of notification must be submitted to the floodplain administrator and to the Federal Emergency Management Agency.
- 3. The applicant shall be responsible for providing the necessary maintenance for the altered or relocated portion of the water course so that the flood carrying capacity will not be diminished.
- 4. The applicant shall meet the requirements to submit technical data in Sections K (1) and K (2) when an alteration of a water course results in the relocation or elimination of the special flood hazard area, including the placement of culverts.

## J. Requirement to Submit New Technical Data

- 1. For all development proposals that impact floodway delineations or base flood elevations, the community shall ensure that technical data reflecting such changes be submitted to FEMA within six months of the date such information becomes available. These development proposals include:
  - a. Floodway encroachments that increase or decrease base flood elevations or alter floodway boundaries;
  - b. Fill sites to be used for the placement of proposed structures where the applicant desires to remove the site from the special flood hazard area in accordance with 4.0 (A) (3);
  - c. Alteration of watercourses that result in a relocation or elimination of the special flood hazard area, including the placement of culverts;
  - d. Subdivision or large-scale development proposals requiring establishment of base flood elevations according to 4.0 (A) (3).
- 2. It is the responsibility of the applicant to have technical data prepared in a format required for a Conditional Letter of Map Revision or Letter of Map Revision and submitted to FEMA. Submittal and processing fees for these map revisions shall be the responsibility of the applicant.